

Abstract

The modified centrifugal fan wheel comprises a hollow hub and a set of blade. A hollow hub axis is disposed at the center of a hollow portion of the hollow hub. Along a top side surface of the hollow hub is a curved guiding inlet part and along a bottom side surface of the hollow hub is a curved surface with a smooth fillet extending to a closed part. A set of blades is arranged around an outer part of the hollow hub, having an up ring and a down ring. An inner part of the down ring is connected to the closed part of the hollow hub. Blades are disposed between the up ring and the down ring. Wind holes are disposed equidistantly between each of the blades and equidistant perforations are arranged on the surface of the down ring, connecting to the wind holes between each of the blades. By the closed part and the perforation of the fan wheel, low noise and low current are provided. Meanwhile, power consumption is reduced and working performance of the fan wheel is also improved.